

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA



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Order Instituting Rulemaking To Enhance
the Role of Demand Response in Meeting
the State's Resource Planning Needs and
Operational Requirements.

Rulemaking 13-09-011
(Filed September 19, 2013)

**REPLY COMMENTS OF COMVERGE, INC., CPOWER, ENERNOC, INC., AND
ENERGYHUB ("JOINT DR PARTIES") ON ADMINISTRATIVE LAW JUDGE'S
RULING REQUESTING RESPONSES TO ADDITIONAL QUESTIONS
IN REGARD TO 2018 AND BEYOND DEMAND RESPONSE PROGRAMS**

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Comverge, Inc., CPower, EnerNOC, Inc., and EnergyHub ("Joint DR Parties") respectfully submit these joint Reply Comments on the Administrative Law Judge's (ALJ's) Ruling Requesting Responses to Additional Questions in Regard to 2018 and Beyond Demand Response (DR) Programs issued on May 20, 2016 (May 20 ALJ's Ruling). These Reply Comments are timely filed and served pursuant to the Commission's Rules of Practice and Procedure, the May 20 ALJ's Ruling, and the ALJ's Email Ruling of July 11, 2016, granting an extension of time to file these Reply Comments to July 15, 2016.

**I.
SUMMARY**

The Joint DR Parties have reviewed the 18 sets of responses provided by other parties to questions posed by the May 20 ALJ's Ruling on 2018 and beyond DR programs. While the Joint DR Parties offer reply comments below, we also observe that there was a wide range of responses to the questions that that may not be adequately vetted simply through reply comments. For this reason, the Joint DR Parties recommend exploring many of these questions and responses further in Workshops.

II.
REPLY TO PARTY RESPONSES ON
DEMAND RESPONSE GOAL AND OBJECTIVES (CATEGORY 1)

A. Should Goals Be Developed for Load-Modifying and Supply-Side DR Resources?

The Joint DR Parties think that it makes sense to develop separate Load Modifying Resource (LMR) and Supply-Side (SS) DR Resource Goals. Opower, Inc. (Opower) and the Office of Ratepayer Advocates (ORA) agree.¹

The Commission has bifurcated DR into these categories, the same categories studied by Lawrence Berkeley National Laboratories (LBNL) in developing their Phase I DR potential analysis (Interim Report). What constitutes LMR and SS DR resources may be modified from the Interim Report that was released in April 2016.

For example, the LBNL Interim Report only classified time-of-use (TOU) rates as LMR DR. In the Phase II analysis, other forms of LMR will be included, such as Critical Peak Pricing (CPP) and Peak-Day Pricing (PDP). The Commission determined that DR that was neither incorporated into the California Independent System Operator's (CAISO's) market nor was included in the California Energy Commission's (CEC's) Integrated Energy Policy Report (IEPR) would not count for resource adequacy (RA).²

However, many parties have asked the Commission not to develop specific goals for LMR and SS DR resources.³ The Joint DR Parties appreciate that creating an overarching goal for all DR and leaving it up to the utility to determine as between LMR or SS DR resources how to meet the goal is a more flexible approach for the Investor Owned Utilities (IOUs). While, the

¹ ORA Opening Comments on Additional Questions, at p.2; Opower Opening Comments on Additional Questions, at p. 6.

² D.15-11-042, at p. 21. The Joint DR Parties have a pending Application for Rehearing on this Decision.

³ Pacific Gas and Electric Company (PG&E) Opening Comments on Additional Questions, at pp. 5-6; San Diego Gas and Electric Company (SDG&E) Opening Comments on Additional Questions, at pp. 4-5; Southern California Edison Company (SCE) Opening Comments on Additional Questions, at pp. 2-3; Nest, Inc. (Nest) Opening Comments on Additional Questions, at p. 3.

Joint DR Parties understand the appeal of that approach, it nevertheless seems that the Commission should develop goals that are consistent with the designations that it has adopted and with the information provided by LBNL in its analysis.

In adopting DR goals, however, the parties and the Commission should recognize that the energy world is changing very rapidly. Any goal should carry with it some flexibility in recognition of a rapidly changing energy environment. Neither should the goals be viewed as caps, but mile markers, perhaps, to measure progress.

For example, a resource can be providing distribution-level services while also being available to provide transmission-level services. But, RA value alone does not take into consideration the distribution value. Especially as distributed energy resources (DERs) are being integrated, the potential for multiple uses increases. In the LBNL Phase II analysis, advanced DR, including the use and integration of DERs, will be explored.

B. Should Goals Apply to Third Parties and Load Serving Entities?

As stated in the Joint DR Parties' responses in their July 1 Comments, the goal should apply to the entity who procures DR, not the party providing DR. Parties' positions on whether the goal should apply to third parties or only the IOUs varied. Some said that the Commission should establish goals that apply to both IOUs and third parties. Others said that the Commission should only establish goals for IOUs.

In thinking about the question further, the Joint DR Parties clarify their previous response. Further clarification as to the purpose of the goal may be required.. If the intent is to establish a target of LMR and SS DR resources that can be realized on the system, the IOU is in much more of a position to influence the outcome. However, it may be important to establish a goal for the amount of DR that is provided by third parties in order to encourage growth of third

party-provided DR. But, even that goal, a percentage of DR provided by third parties, would not apply to third parties, but would be a measure of third party progress on any particular utility service territory.

C. What is the Role of the IOU in Providing DR Services?

Several parties included comments about the role of the IOU in either providing DR services in the future or in administering the Demand Response Auction Mechanism (DRAM). Some say that the IOUs should no longer provide administratively determined DR programs/services.⁴ Others say that the value of all DR services should be determined in the DRAM.⁵ Lastly, some say that the IOU should not be administering the DRAM going forward.⁶

The DRAM was established as a pilot for 2016 and 2017.⁷ The structure of the DRAM was not intended to be precedential for a permanent program.⁸ A lot of really good work went into the development of the DRAM.

With the exception of the solicitation and selection process, much of the experience of participating in DRAM is yet to be determined. The Joint DR Parties agree with others that the issue of continued administration of DRAM by the IOUs should be explored. In addition, the selection process, itself, is opaque to third-party bidders. The Commission should also explore what means can be used to make the selection process more transparent while providing protection for sensitive market data.

⁴ The Utility Reform Network (TURN) Opening Comments on Additional Questions, at p. 12; ORA Opening Comments on Additional Questions, at p. 2.

⁵ OhmConnect Opening Comments on Additional Questions, at p. 6; TURN Opening Comments on Additional Questions, at p. 2.

⁶ OhmConnect Opening Comments on Additional Questions, at p. 6; TURN Opening Comments on Additional Questions, at p. 8.

⁷ D.14-12-024, at p. 33.

⁸ SCE Advice Letter 3208-E; PG&E Advice Letter 4618-E; SDG&E Advice Letter 2729-E, at p. 3.

A permanent auction mechanism must give third parties that participate in it the confidence that the auction is conducted in a fair and impartial way. and the selection criteria are as transparent as possible. The current DRAM structure makes transparency difficult because it is a pay-as-bid auction and the results of which, in terms of payments, will not be known for another 3 years after the auction was conducted.

In contrast, a centrally cleared auction identifies the winning bidders and the amount of the award to all. The results are available on websites. It is clear, based upon where the market cleared why an individual bid was either selected or rejected. None of that transparency exists in this DRAM design.

If the design of DRAM will not be transparent in the manner described above, then the structure must be so as to remove doubt of any potential self-dealing. Keep in mind that auctions can only succeed and attract new market participants if there is confidence in the process being fair and impartial. The Joint DR Parties are not making any allegations that the DRAM process was unfair. However, the simple fact of the matter is that there is no objective, public data to validate the auction results.

It may be necessary, however, to minimize the potential for an impression of impropriety or self-dealing to occur. If the IOUs did not have programs of their own that they were also bidding into the wholesale market, then there would not be concerns about how the IOU administered its own programs vis-à-vis third party bids. But, since the IOUs do have such programs, and are advocating to continue to have DR programs, then it seems that the Commission should consider structurally separating the role of the administrator of the DRAM from the IOU, which is also administering its own programs.

Even if such a structural separation were to occur, it is also important to provide some transparency to bidders as to the selection of bids. The Joint DR Parties are concerned that bidders have been able to access government grants and funding and have used that funding to reduce their bids into the DRAM.

On this point, there are a lot of reasons why subsidized bids are a concern in any auction and particularly in a DRAM Pilot. First, not all parties will have access to these funds. So, parties that are bidding their true costs of offering an unsubsidized service are disadvantaged. Second, the resulting costs may be low, but they are neither sustainable nor are they representative.

If the purpose of this pilot exercise is to learn how DR bids will be submitted in a wholesale market context, subsidized bids do not represent a true picture. This is another opportunity for mischief in the credibility of the DRAM. There have been auctions in which shareholders subsidize the true cost of a bid in order for the participant to be a “lost” leader. But, again, those schemes for gaining market share are not lasting. The Joint DR Parties, therefore, caution the Commission against encouraging this behavior as it will, again, diminish confidence in the DRAM process.

D. Metrics

Many parties have proposals to deal with how to measure the progress of DR adoption. Some propose measuring only the value provided to the system, in MW.⁹ In a mature market, that may be true; but, in a developing market, further information needs to be understood in terms of barriers to entry, etc.

⁹ SCE Opening Comments on Additional Questions, at p.3.

The DRAM Working Group had developed metrics that were developed and submitted in the IOUs' Advice Letters that included the DRAM contract.¹⁰ In addition, the Joint DR Parties proposed additional metrics.

Megawatt values, alone, will not tell the story of from whom the capacity is coming and whether there is diversity in the provision of DR services. In addition, it is important to note whether customers value the service, as structured, which will be represented in, not only the number of customers that enroll, but whether those customers continue to participate in the program, including the number of customers that terminate their DR relationship.

The Joint DR Parties, over the last several years, have noticed a decline in DR adoption, for various reasons that has gone largely unnoticed by the Commission. Understanding what is driving customer acceptance, or the lack thereof, is important to a developing, and hopefully, sustaining, a DR market structure.

E. Back-Up Generation

Sierra Club has, again, raised their support for the Energy Division Proposal for ensuring that Back-Up Generation (BUGs) are not employed as DR resources. The matter regarding BUGs has been submitted to the Commission for its consideration, and parties are awaiting a proposed resolution. Sierra Club had its opportunity to support the Energy Division Proposal at that time, and did so. The questions asked by the May 20 ALJ's Ruling did not solicit additional feedback on BUGs. In fact, in DRAM, BUGs were prohibited from participating in the Pilot. Sierra Club has offered no information to support its position that the prohibition and the declarations are insufficient to deter the use of BUGs in DRAM. If Sierra Club wants to modify the DRAM rules that allows for customer declarations, they should file a petition to modify D.14-12-024.

¹⁰ SCE Advice Letter (AL) 3208-E; PG&E AL 4618-E; SDG&E AL 2729-E, at pp. 22-24.

The Joint DR Parties ask the Commission to stop allowing Sierra Club multiple bites at the apple on an issue that has been examined, and on which Sierra Club has participated and provided its position to the Commission. The issue is pending Commission action. The Joint DR Parties ask the Commission to reject Sierra Club's comments as procedurally inappropriate and beyond the scope of or non-responsive to the questions asked by the May 20 ALJ's Ruling.

III. REPLY TO PARTY RESPONSES ON IMPROVING DEMAND RESPONSE PROGRAM DESIGN (CATEGORY 2)

A. To What Level of Granularity Should End-Use Data Be Made Available?

The Interim Report notes that there is a lack of data available to accelerate DR-enabling technology and suggests anonymizing data from the project to empower third parties and eliminate a key market barrier.¹¹ In their Opening Comments, parties do not present opposition to having more availability of end-use load data to increase the success of targeted marketing to match the end-use with grid needs. Yet, questions remain regarding the availability and the granularity of the end-use load data, and, more importantly, how the Commission will address privacy concerns.

Regarding the availability and granularity questions, Pacific Gas and Electric Company (PG&E) states it “does not have readily available information about disaggregated end-uses behind the customer meter.”¹² CAISO suggests that programs should be designed to screen and select high performing customers.¹³ However, there is no easy way for all participants to do so

¹¹ Interim Report, at p. 94.

¹² PG&E Opening Comments on Additional Questions, at p. 9.

¹³ CAISO Opening Comments on Additional Questions, at p. 5.

today. Finally, ORA and OhmConnect, Inc. (OhmConnect) suggest creating a database or online portal, respectively,¹⁴ but do not provide details on how this would be developed.

Although a database will be a valuable tool for third party providers, it will require some sort of marketing or incentive from the utility to capture the additional customer data to make the database meaningful on a larger scale. The Commission should explore how this information may be more formally provided to third- parties in order to ensure the most efficient use of resources and the most competitive programs. SDG&E's example of using segmentation for Whenergy¹⁵ is fantastic; third parties could also see a steep increase in success with access to similar data. The Joint DR Parties will be supportive of efforts by the Commission to explore ways in which data from the Interim Report is made available so the DR potential in California can be realized.

Regarding the privacy concerns, it may be possible to provide anonymized data from the Interim Report, but the ability to move to a more granular level of data will be dependent on resolution of data privacy issues. In their Opening Comments, Clean Coalition suggests that the Commission "respect customer privacy through the use of anonymized data or neutral intermediaries."¹⁶ The Utility Reform Network (TURN) also raises the concern of "infringing on customer privacy concerns."¹⁷ The Joint DR Parties encourage the Commission to work with stakeholders to develop a balance of providing useful and granular end-use data while also protecting customer privacy.

Absent some kind of useful data release from the IOUs or a neutral third party, there is no way that third parties can target market DR to customers whose load profile is consistent with

¹⁴ ORA Opening Comments on Additional Questions, at p. 5; OhmConnect Opening Comments on Additional Questions, at p. 4.

¹⁵ SDG&E Opening Comments on Additional Questions, at p. 28.

¹⁶ Clean Coalition Opening Comments on Additional Questions, at p. 6.

¹⁷ TURN Opening Comments on Additional Questions, at p. 15.

that of the system or local load profile. Accomplishing efficient target marketing of DR services in such a way is fully dependent on access to information that is not currently available. This kind of process would also reduce the cost of marketing to customers, which is significant to third parties.

B. How Should the Integration of Clean Energy Technologies with Demand Response Occur if DRAM is the Primary Procurement Method for DR?

The Interim Report suggests the cost of DR can be reduced if DR is integrated with other clean energy service offerings (e.g., energy efficiency, electrification of heating and transportation, and distributed generation) in mutually supported portfolios.¹⁸ Although parties did not offer opposing views, most parties showed strong support for a continued DRAM offering. Yet, if the Commission adopts the DRAM as the only mechanism to procure DR resources, then it is likely that DR providers will exclude other clean energy technologies in order to remain cost competitive in the current DRAM auction construct.

As such, the Commission's ability to incentivize the integration of clean energy technologies with DR resources will be dependent on the procurement mechanisms it adopts. Although funding for clean energy technologies can be obtained through other funding mechanisms, a DR provider's ability to integrate these resources may be diminished due to the timing of funding and other regulatory barriers. The Joint DR Parties recommend the Commission include consideration of this issue in the scope of any future DRAM program development.

¹⁸ Interim Report, at p. 94.

C. How Should Value Stacking of a DR Resource Be Treated?

In parties' Opening Comments and the Interim Report, there are references to the multiple values (or value stacking) that a DR load resource can provide to the grid. However, this only appears to be discussed in the context of energy storage.

The Joint DR Parties do not dispute that a storage device can provide multiple values, but other end-use technologies are capable of providing multiple value streams as well, either alone or in combination with other DERs. If the Commission seeks to make energy storage more cost-effective through value stacking, it should allow the same policy to apply to other end-use technologies. For example, a control device for an air conditioner can provide value stacking for TOU participation, CAISO energy market, and local reliability. Furthermore, if the Commission allows a storage device to stack values because of its use limitations (e.g., cycle life), then the Commission should allow the same value stacking for other end-use technologies with use limitations (e.g., customer satisfaction or customer opportunity costs).

IV. REPLY TO PARTY RESPONSES ON INCREASING DR PARTICIPATION AND PERFORMANCE AND THIRD PARTY PROVIDER PARTICIPATION (CATEGORIES 3 AND 4)

A. Term of Future DRAM

In their Opening Comments, the Joint DR Parties recommend that future DRAM contract lengths should be expanded to include a rolling three-year term. All three IOUs support contract lengthening of some kind.¹⁹ OhmConnect concurs offering that this will provide DR parties with greater planning certainty and allow DR providers to capitalize on the long-term avoided capacity costs of their DR supply resources.²⁰

¹⁹ PG&E's Opening Comments, at p. 32; SCE's Opening Comments, at p. 16; SDG&E's Opening Comments, at p. 36.

²⁰ OhmConnect Opening Comments on Additional Questions, at p. 10.

The Joint DR Parties also support suggestions from parties like Olivine, Inc. (Olivine) that using a clearing price or band would improve future DRAM procurement.²¹ San Diego Gas and Electric Company (SDG&E) suggests that the DRAM should be moved to an all-source resource RA solicitation and that DR should compete with other resources. The Joint DR Parties disagree and believe the best option for procuring DR is through a transparent auction mechanism.

The Commission and the parties have expended a great deal of effort to create a DRAM solicitation process and a sample contract. The process was specifically designed to encourage third party participation in the wholesale market. Now that the LBNL has, in its Interim Report, determined that there is approximately 6 GW of incremental DR potential in California, some of which is supply-side DR, why would this process be abandoned for an all-source Request for Offer (RFO) process without any idea of the requirements placed upon DR resources or the evaluation method to select a winning bidder?

Lastly, SDG&E asserts that if the “DRAM program will continue outside the annual RA RFO solicitation, Load Impact Protocol Requirements must be applicable to the DRAM program if the historical performance data is available, as it applies to other utility’s DR programs.”²² The Joint DR Parties have no objection to conducting the DRAM RFO at a time that will allow the IOUs to include the DRAM awards in its RA demonstrations. Keep in mind both DRAM I and DRAM II were conducted with very short lead time.

The Commission has already determined in D.16-06-045 that DRAM participation will be exempt from the Load Impact Protocols through the 2019 RA Compliance Year.²³ SDG&E

²¹ Olivine Opening Comments on Additional Questions, at Category 4, Question 3.

²² SDG&E Opening Comments on Additional Questions, at p. 38.

²³ D.16-06-045, Ordering Paragraph 5, at p. 65.

presents no new information as to why that determination should be changed. Therefore, the Joint DR Parties recommend that the Commission disregard SDG&E's comments on this issue.

B. Cap on DRAM

The Joint DR Parties do not believe that a cap for DRAM is necessary. Instead, the Joint DR Parties agree with ORA, TURN and others that the Commission should not impose any MW limitation on the DRAM. Southern California Edison Company (SCE) provides scenarios of what might happen in the DRAM to show how too small of a budget cap could limit utility procurement artificially.²⁴ However, TURN suggests that no limits be placed on DRAM, as long as the price is below the cost-effectiveness benchmark.²⁵ LBNL shows the amount of DR potential relative to a \$200/kW-year referent. The Joint DR Parties believe that simplifying the cost-effectiveness methodology to such a demonstration would be beneficial.

The Joint DR Parties agree that the market should determine the price for DR, including utility programs that are providing the same service that the DRAM is providing. But, since that DRAM process is not transparent as to the value of DRAM resources, it would be difficult to ascertain what the value of a utility service is. Further, as noted above, the value of DRAM resources that are receiving grants or other subsidies will not be representative of the true cost of providing the service.

Utility programs may be used to provide local distribution reliability as well as transmission-level reliability. Therefore, pricing variances must take into account the purpose for which the resource will be used. Not all resources will be used for the same purpose. Value should be attributed to resources that are providing multiple services, as described in the Joint DR Parties' responses to the Category 2 questions in their July 1 Comments.

²⁴ SCE Opening Comments on Additional Questions, at p. 15.

²⁵ TURN Opening Comments on Additional Questions, at p. 22.

TURN also asks that the Commission compare the costs of utility tariffed programs to the third party aggregator DRAM bids.²⁶ As stated in the Joint DR Parties' July 1 Comments, these two types of programs cannot be compared as the providers in the DRAM were on the hook to not only to hire a Scheduling Coordinator (SC), the cost of which was generally reimbursed, but to also cover Demand Response Provider (DRP) costs.

In addition, third party DRPs/aggregators have other costs (recruiting, CPUC bond etc.) that utilities are either not subject to or are able to include in their cost of service rates to customers. Thus DRAM bidders' prices would inherently be higher as they include costs the utility does not cover directly in the individual program costs.

SCE suggests integrating qualitative selection criteria based on past performance. That may be an appropriate consideration for a mature program, but it is not an appropriate consideration for a pilot. This construct would penalize third parties that took significant risks to make an investment to gain experience with wholesale market participation in the pilot in years 1 or 2, but may have suffered performance issues due to unduly burdensome processes at the IOUs, CAISO and Commission.

C. IOU Evaluation of Sensitive and Proprietary Market Strategies

In order to evaluate the success of the DRAM, some evaluation of key aggregated and masked data makes sense. CLECA suggests an annual report that provides such data to interested parties such as information on amount awarded vs amount received; number of customers by customer class; and weighted averages of PDR MWs bid and dispatched.²⁷ However, PG&E suggests that the Energy Division require Sellers to provide competitive

²⁶ TURN Opening Comments on Additional Questions, at p. 22.

²⁷ CLECA Opening Comments on Additional Questions, at p. 18.

strategic bidding information on bid prices, dispatch history by day, month and amount and an illustration of bid accuracy.²⁸

The Joint DR Parties are not comfortable with DR providers being required to share proprietary market strategies with the IOUs so that the IOUs can make bid selections on that basis. First of all, sharing proprietary market strategies with the IOU, which is also a market participant, could be devastating for third party participants. It is not an appropriate role for the IOU to have access to that sensitive information for any single company, much less all third party providers within its service territory.

In addition, evaluation of success also does not rely on whether a specific individual registration was used in a DRAM aggregation or for something else. Lastly, the Joint DR Parties support the exploration of questions posed by OhmConnect²⁹ to better understand not only how successful the DRAM was at procuring RA, but also to gain a better understanding of how it can be improved in future years.

D. Ease of enrollment

The Joint DR Parties support PG&E's exploration of opportunities to "make enrolling in its DR programs and the DRAM easier and less time intensive."³⁰ The Joint DR Parties applaud these efforts and look forward to helping in this design however possible. In addition, the Joint DR Parties echo the sentiment provided by TURN that the "interim report models participation or residential customers in demand response programs as based on two factors – level of marketing and the level of customer incentives."³¹

²⁸ PG&E Opening Comments on Additional Questions , at p. 34.

²⁹ OhmConnect Opening Comments on Additional Questions, at p. 11.

³⁰ PG&E Opening Comments on Additional Questions, at p. 26.

³¹ TURN Opening Comments on Additional Questions, at p. 19.

The Joint DR Parties also agree with TURN that customers may also respond strongly to non-financial incentives, but would also argue that ease of enrollment is likely the single most important factor in participation numbers. Nest offers this same perspective in its Opening Comments: “Nest has found that requiring customers to complete a full CISR form as part of enrollment in the DRAM has led to significant drop-off in program participation.”³²

E. Increasing Participation

The Joint DR Parties further agree with TURN that “continuing to promote third party participation in residential demand response by growing the DRAM is the best short term path to promote participation”³³ There are very few opportunities for residential aggregators to participate in utility DR programs aside from things like PTR – though there may be pilots developed as a result of this proceeding. In the case that registrations limit the growth or performance of the DRAM, the Joint DR Parties agree with TURN’s suggestion that the Commission explore alternative means of processing registrations and CISR-DRP forms.³⁴ This process suggestion may help to alleviate the process issues the Joint DR Parties outlined in their initial comments.

On the matter of Opower’s suggestion that opt-out programs can be used to overcome lack of awareness in order to increase participation,³⁵ the Joint DR Parties see this comparison as a bit of apples to oranges. The argument is circular to suggest that opt-in programs perform poorly because the customer must be educated to enroll, while opt-outs perform well because the customer learns while doing. In addition, there is no consideration of the “free-ridership” effect and costs which occur through an opt-out event-based program. In D.13-07-003, the

³² Nest Opening Comments on Additional Questions, at p.12.

³³ TURN Opening Comments on Additional Questions, at p. 20.

³⁴ Id., at p. 21.

³⁵ Opower Opening Comments on Additional Questions, at p. 13.

Commission concluded that both the SCE and SDG&E Peak Time Rebate programs should be revised from a default program to an optional program to decrease free ridership.³⁶

Further, if the provider had no access to customer data (as is the case in most opt-in technology based programs), they could not drive awareness. If technology providers were more easily able to enroll their customers, opt them in to programs, and access their customer data, higher participation would be seen in those programs.

**V.
REPLY TO PARTY RESPONSES ON CAISO MARKET
INTEGRATION OF UTILITY PROGRAMS (CATEGORY 5)**

A. Triggers³⁷

The Joint DR Parties support the comments of PG&E, SCE, SDG&E, AMS³⁸ and others that multiple program triggers are appropriate as different DR programs can support different grid needs in addition to meeting system RA requirements.³⁹ The Joint DR Parties support TURNs suggestion that triggers for distribution support should be explored in a workshop to support transparency for customer in how triggers are set or designed.⁴⁰

PG&E offers an intriguing suggestion for how to allow customers to manage potential fatigue by providing flexibility in how to operate in their utility DR programs:

“Offer the option for customers and aggregators to elect their own availability to provide value to the grid. By design, this type of participation option would be at customers’ discretion and would therefore be less likely to result in customer fatigue. PG&E believes that this participation option should also be attractive to customers capable of more frequent dispatch, either due to the nature of the load they shed during a DR event (e.g. lighting), or the end-use technologies they automate to reduce load (e.g. batteries), with little or no

³⁶ D.13-07-003, Conclusion of Law 6, p. 38.

³⁷ See: May 20 ALJ’s Ruling, Category 5, Questions 1 & 2.

³⁸ SDG&E Opening Comments on Additional Questions, at p. 39; SCE Opening Comments on Additional Questions, at pp. 19-20; PG&E Opening Comments on Additional Questions, at p. 36; AMS Opening Comments on Additional Questions, at p. 12.

³⁹ ORA Opening Comments on Additional Questions, at p. 10.

⁴⁰ TURN Opening Comments on Additional Questions, at p. 22.

disruption to their lifestyle, comfort or business operations. This participation option will also accommodate customers who are unable to meet the minimum requirements for an RA resource on their own, thus making DR participation a more feasible option.”⁴¹

Allowing aggregators and customers to structure resource availability to make DR contributions that work for differently situated customers and provide a more reliable resource could bring great benefits both to participating customers and to the grid overall.

The Joint DR Parties also agree with PG&E that the goal of the Commission with regards to utility-managed programs should not be to always seek to maximize the number of dispatched hours of DR regardless of the conditions. Instead, and similar to other generation resources, the goal should be that the most economic resources are dispatched. This is the focus of the annual Energy Resource Recovery Account (ERRA) proceeding and reflects the prudent use of ratepayer funds. Applying this to DR programs, the cost of DR program dispatch is reflected in its opportunity cost which in turn reflects the willingness and capability of customers to respond to an event.”⁴² Needlessly fatiguing a customer to meet arbitrary goals of how many hours of dispatch make sense for a resource leads to lower reliability and decreasing DR participation.

The Joint DR Parties do NOT support TURN’s concept of including an evaluation of CAISO “bidding strategies” for DRAM PDR resources as a part of the DRAM evaluation⁴³ however. Market bidding strategies are highly complex, individualized to the customers that make up a DRAM resources, and not necessarily known when DRAM bids are submitted. One desirable component to customers of participating in a DRAM pilot is being able to work with their aggregator to have a market bidding strategy that meets their needs – whether it is frequent dispatch to maximize energy revenues or less frequent dispatches to focus response on times of

⁴¹ PG&E Opening Comments on Additional Questions, at p. 37.

⁴² Id.

⁴³ TURN Opening Comments on Additional Questions, at p. 23.

grid stress. This highly individualized approach is a benefit that third party market participation brings to the table.

SCE also raised a point that the Joint DR Parties would like to highlight as work continues to integrate DR into the CAISO markets. The current DR programs and the CAISO markets have a number of mis-matches as the CAISO market timing with Day Ahead and Real Time markets were designed for traditional conventional resources.⁴⁴ SCE suggests designing program to better fit into CAISO markets – which is appropriate.

However, the Joint DR Parties also believe that the Commission should urge the CAISO to consider ways to capture the value the Commission and utilities have been able to capture to date in DR programs that are dispatchable in between Day Ahead and Real Time as more resources are integrated. The Commission has long recognized that several hours, a single hour or 30 minutes, are all time frames for programs to be triggered that provide appropriate notice to customers and value to the grid – these time frames are not captured anywhere in CAISO markets. If California is truly moving towards a world where DERs – including DR – are to be integrated into the ISO markets and provide many of the new resources, the CAISO should be encouraged to move beyond a traditional resource-only market structure and consider structures that enhance the benefits these resources bring.

B. Pre-Dispatch⁴⁵

The Joint DR Parties did not take a position on the definition of pre-dispatch in their July 1 Opening Comments. The Joint DR Parties agree with SCE's characterization of the issue as not yet being clearly defined for DR and that in CAISOs generation-centric model, a pre-dispatch is

⁴⁴ SCE Opening Comments on Additional Questions, at p. 21.

⁴⁵ See: May 20 ALJ's Ruling, Category 5, Questions 3-5.

a startup instruction.⁴⁶ The Joint DR Parties also agree with PG&E that this issue is scoped in the RA Rulemaking and would be well served for being addressing in a working group.⁴⁷

For a DR resource, the Joint DR Parties believe that a pre-dispatch would not be much different from a dispatch. As NRG Energy, Inc. (NRG) states in its Opening Comments:

“[D]emand response is required to respond to the pre-dispatch notice by curtailing demand at a pre-determined time rather than curtailing demand in response to a real-time dispatch ... Pre-dispatching demand response resources from the day-ahead market requires those resources to curtail demand based on predicted conditions rather than based on actual conditions.”⁴⁸

The Joint DR Parties agree with many other parties, including NRG, SDG&E, SCE and PG&E,⁴⁹ that customers should be compensated for pre-dispatch. How that works and in what circumstances will depend on the final definition of pre-dispatch and what would be required during a pre-dispatch.

ORA asserts that customers are already fully compensated up to their program hours and should not be compensated.⁵⁰ The Joint DR Parties disagree. To the extent that a pre-dispatch as it is finally defined does not get compensation, the Joint DR Parties agree with the California Large Energy Consumers Association (CLECA) that the pre-dispatch should count against the resources MOO,⁵¹ but feel strongly that Advanced Microgrid Solutions (AMS) is correct in stating:

“Compensation should be provided for having resources committed, even if they are not ultimately dispatched. Reserved, but unused, capacity results in a

⁴⁶ SCE Opening Comments on Additional Questions, at p. 21.

⁴⁷ PG&E Opening Comments on Additional Questions, at p. 38.

⁴⁸ NRG Opening Comments on Additional Questions, at p. 7.

⁴⁹ NRG Opening Comments on Additional Questions, at p. 7; SDG&E Opening Comments on Additional Questions, at p. 41; SCE Opening Comments on Additional Questions, at p. 23; PG&E Opening Comments on Additional Questions, at pp. 38-39.

⁵⁰ ORA Opening Comments on Additional Questions, at p. 11.

⁵¹ CLECA Opening Comments on Additional Questions, at p. 23.

resource missing out on other revenue-generation from using that capacity to provide other grid services (e.g., frequency regulation, customer services, etc.).”⁵²

The Joint DR Parties agree with NRG that a “demand response resource that is pre-dispatched through the day-ahead market is required to curtail demand regardless of whether real-time conditions require the curtailment, and should be compensated for that pre-dispatched curtailment the same way it would be compensated for curtailment due to a real-time dispatch.”⁵³ SDG&E, PG&E and SCE also see the need for varying types of customer compensation during pre-dispatch.⁵⁴

C. Baselines⁵⁵

The Joint DR Parties note that most parties who weighed in on baseline-related issues opined on various concerns with the existence of different baselines for IOU programs to those in the ISO markets in the same vein as the Joint DR Parties, with SCE directly stating the concern that “a MW is not treated equally between multiple parties.”⁵⁶ The Joint DR Parties also agree with PG&Es concern with using different baselines between the IOUs and CAISO that “[i]f the capacity value of a DR resource, as determined by the Commission-approved baseline methodology, differs from the capacity that is delivered into the CAISO as measured by the CAISO’s baseline methodology, the IOU and non-IOU DR providers risk a RAIM penalty, even if the DR resource delivers the correct amount of capacity as defined by the Commission.”⁵⁷ Having resources performance calculated and paid on different baselines among the parties can cause meaningful mismatches.

⁵² AMS Opening Comments on Additional Questions, at pp. 12-13.

⁵³ NRG Opening Comments on Additional Questions, at pp. 7-8.

⁵⁴ SDG&E Opening Comments on Additional Questions, at p. 41; PG&E Opening Comments on Additional Questions, at pp. 38-39; SCE Opening Comments on Additional Questions, at p. 23.

⁵⁵ See: May 20 ALJ’s Ruling, Category 5, Questions 6-8.

⁵⁶ SCE Opening Comments on Additional Questions, at p. 23.

⁵⁷ PG&E Opening Comments on Additional Questions, at p. 39.

There were a variety of ways to address the mismatched baselines suggested by various parties, and they have merit. PG&E agrees with the Joint DR Parties' Opening Comments that, as the work in ESDER is completed, the Commission should consider the expanded baseline suite be used in Commission-jurisdictional programs.⁵⁸ CLECA noted that the timing on this would line up well for the Commission to consider... with the 2018 DR program cycle.⁵⁹ SCE suggests the Commission operate on a parallel path to look at expanded baselines.⁶⁰ SDG&E also sees the ESDER working group output lining up with a Commission evaluation of baselines in time for the 2018 and beyond DR program proposals.⁶¹

SCE states:

“[O]ne of the drawbacks SCE has observed with the standard 10 - in -10 baseline with the +/- 20 percent cap of the day-of adjustment is that it undervalues air conditioning (AC) load reduction. On extremely warm days, there is a significant increase in customer consumption during event days when compared to consumption on non-event days (which enters the calculation of the baseline) but the day-of adjustment limit of 20 percent prevents the baseline from being accordingly adjusted upwards. Based on information last year, the cap should have been about 200 percent. Thus, SCE observed that even on the event days when customers drop their load consumption significantly during the hours of the event - (compared to the hours prior to the event), the baseline is so low that the settlement performance calculation used by the CAISO shows little or no performance by the customers.”⁶²

This is a particularly concerning fact around the current baselines and demonstrates the importance of a baseline suite that accurately portrays customer contributions. Without that, customers are going to be discouraged, and DR resources will degrade. The statement made by SCE above lines up with what the Joint DR Parties have experienced with the evaluation of their own customers with HVAC based curtailments.

⁵⁸ PG&E Opening Comments on Additional Questions, at p. 39..

⁵⁹ CLECA Opening Comments on Additional Questions, at p 23.

⁶⁰ SCE Opening Comments on Additional Questions, at p. 24.

⁶¹ SDG&E Opening Comments on Additional Questions, at p. 42.

⁶² SCE Opening Comments on Additional Questions, at p. 24.

Additional suggestions were made by CESA and AMS about the need or lack thereof for baselines for advanced DR or behind the meter storage participating as DR in the CAISO markets. As these resources proliferate, the Joint DR Parties agree that baselines need to take into account and support the use of these resources in the DR space.

D. Penalties⁶³

The Joint DR Parties agree with ORA, which states penalties should be standardized and that “ Supply DR programs should be transferred to DRAM-like procurement, which is subject to CAISO market penalties for non-performance” ⁶⁴ As will be noted below, the Joint DR Parties would like to see a significant movement to third party supply resources. However, it may be possible for the IOUs to need additional event-based DR programs and for supply resources to be different from DRAM.

The Joint DR Parties believe that the CAISO market penalties should be the focus of any penalty discussion for third party supply resources. SCE seems to agree that anything else would be doubling penalizing for the same nonperformance.⁶⁵ PG&E notes that CAISO’s market penalties should not be factored in because they already will apply to supply resources. The Joint DR Parties find this strange logic – the penalties apply and ARE the penalties at least for third party supply resources. It may make sense for certain utility programs to have a different penalty structure – but when focused on third party supply resources, the CAISO market mechanisms should be the focus of any penalty discussion.

E. Other Matters

The final two questions in Category 5 focused on re-evaluation of the Commission’s rules on net benefits test and default load adjustment (Question 11) and utility filing of weekly

⁶³ See: May 20 ALJ’s Ruling, Category 5, Question 9.

⁶⁴ ORA Opening Comments on Additional Questions, at p. 12.

⁶⁵ SCE Opening Comments on Additional Questions, at p. 26.

DR exception reports (Question 12). The Joint DR Parties did not have comments on these questions initially and do not now after review of the responses of other parties.

VI. CONCLUSION

The Joint DR Parties renew their request that the responses included in their Opening and now these Reply Comments be incorporated in any Commission action taken in addressing 2018 and beyond DR Programs. Most importantly, it is the Joint DR Parties' position that, given the wide range of responses to the questions posed by the May 20 ALJ's Ruling, these questions and the responses may not be adequately vetted simply through this comment process. For this reason, the Joint DR Parties recommend that many of these questions and responses should be further explored with Commission staff and stakeholders in Workshops.

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